SERVICE MANUAL

OKANO RR 5200 CD.

AM/FM
AM/FM/LW

GREAT WALL ELECTRONIC INTERNATIONAL LTD.

MODEL : GW-388

DATE : 23-8-91
P.1

ALIGNMENT INSTRUCTION

FM SECTION

STEP	ALIGNMENT FREQ.	TEST EQUIPMENT	SIGNAL-IN	SIGNAL-OUT	ADJUSTMENT	REMARK
	IF 10.7MHz	(1) FM IF SWEEP GENERATOR. (2) ALIGNMENT OSCILLOSCOPE. (3) POWER SUPPLY	INJECT THE IF SWEEP SIGNAL THROUGH 500pf CAPACITOR TO 2 POINT.	SIGNAL ARE TAKEN OUT FROM 3 POINT.	ADJUST T103 AND T102 REPEAT TO GET BEST "S" CURVE AT 10.7 MHz	(1) BAND SW. IN FM POSITION. (2) VOL. CONTROL IN MIN. POSITION. (3) TUNE TO HIGH END.
2	108.25MHz	(1) FM RF SWEEP GENERATOR. (2) ALIGNMENT OSCILLOSCOPE. (3) POWER SUPPLY	INJECT THE RF SIGNAL DIRECTLY TO 1 POINT.	SAME AS STEP 1.	ADJUST CT302 TO GET OUTPUT AT 108.25MHz	SAME AS STEP 1.
	87.35MHz	SAME AS STEP 2.	SAME AS STEP 2.	SAME AS STEP 1.	ADJUST L105 TO GET OUTPUT AT 87.35MHz	TUNE TO LOW END
4	REPEAT STEP 2,3 UNTIL NO FURTHER IMPROVEMENT CAN BE MADE.					
5	106MHz	SAME AS STEP 2.	SAME AS STEP 2.	SAME AS STEP 1.	ADJUST CT301 TO GET MAX. OUTPUT.	TUNE TO 106MHz
6	90MHz	SAME AS STEP 2.	SAME AS STEP 2.	SAME AS STEP 1.	ADJUST L104 TO GET MAX. OUTPUT.	TUNE TO 90MHz
7	REPEAT STEP 5,6 AND THEN STEP 5,6 UNTIL NO FURTHER IMPROVEMENT CAN BE MADE.					
8	98MHz	(1) OSCILLOSCOPE (2) COUNTER		SIGNAL ARE TAKEN OUT FROM 4 POINT.	ADJEST VR101 TO GET 76KHz +/-0.1 KHz AT 4 POINT.	(1) BAND SW. IN FM STEREO POSITION (2) TUNE TO 98MHz

MW SECTION

STEP	ALIGNMENT FREQ.	TEST EQUIPMENT	SIGNAL-IN	SIGNAL-OUT	ADJUST	REMARK
1	465 KHz	(1) AM IF SWEEP GEN. WITH LOOP ANTENNA. (2) ALIGNMENT OSCILLOSCOPE. (3) POWER SUPPLY.	LET THE MW ANT COIL CLOSE TO MW GEN. ANTENNA.	TAKE OUT THE SIGNAL FROM 3 POINT.	ADJUST T101 TO GET MAX. OUTPUT AT 465 KHz.	(1) BAND SW. IN MW POSITION. (2) VOL. CONTROL AT MIN POSITION (3) TUNE TO HIGH END.
2	515 KHz	(1) MW SWEEP GEN. WITH ANT. (2) ALIGNMENT OSCILLOSCOPE. (3) POWER SUPPLY.	SAME AS STEP 1.	SAME AS STEP 1.	ADJUST L106 TO GET OUTPUT AT 515KHz	TUNE TO LOW END
3	1630 KHz	SAME AS STEP 2. C 03 TUNE TO HIGH END	SAME AS STEP 1.	SAME AS STEP 1.	ADJUST TO GET OUTPUT AT 1630KHz	
4	PEPEAT STEP 2,3 UNTIL NO FURTHER IMPROVEMENT CAN BE MADE.					
5	1400 KHz	SAME AS STEP 2.	SAME AS STEP 1.	SAME AS STEP 1.	ADJUST CT304 TO GET MAX. OUTPUT AT 1400KHz.	TUNE TO 1400KHz
6	600 KHz	SAME AS STEP 2.	SAME AS STEP 1.	SAME AS STEP 1.	ADJUST AM ANT. COIL TO GET MAX. OUTPUT AT 600KHz.	TUNE TO 600KHz
7	REPEAT STEP 5,6 UNTIL NO FURTHER IMPROVEMENT CAN BE MADE.					

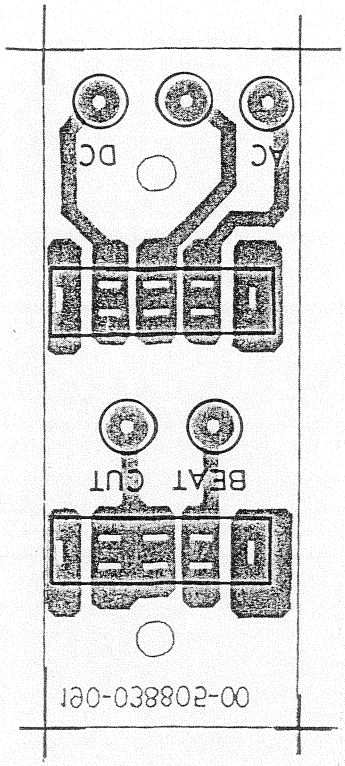
LW SECTION

STEP	ALIGNMENT FREQ.	TEST EQUIPMENT	SIGNAL-IN	SIGNAL-OUT	ADJUST	REMARK
1	270KHz	(1) LW SWEEP GEN. WITH ANT. (2) ALIGNMENT OSCILLOSCOPE. (3) POWER SUPPLY.	LET THE LW ANT COIL CLOSE TO LW GEN. ANTENNA.	TAKE OUT THE SIGNAL FROM 3 POINT.	ADJUST CT106 TO GET OUTPUT AT 270KHz	(1) BAND SW. IN LW POSITION. (2) VOL. CONTROL AT MIN POSITION (3) TUNE TO HIGH END.
2	145KHz	SAME AS STEP 1.	SAME AS STEP 1.	SAME AS STEP 1.	CHECK OUTPUT AT 145KHz +10KHz -5KHz	TUNE TO LOW END
3	REPEAT STEP 1.2 UNTIL NO FURTHER IMPROVEMENT CAN BE MADE.					
4	260KHz	SAME AS STEP 1.	SAME AS STEP 1.	SAME AS STEP 1.	ADJUST CT105 TO GET MAX. OUTPUT AT 260KHz.	TUNE TO 260KHz
5	160KHz	SAME AS STEP 1.	SAME AS STEP 1.	SAME AS STEP 1.	ADJUST LW ANT. COIL TO GET MAX. OUTPUT AT 160KHz.	TUNE TO 160KHz
6	REPEAT STEP 4,5 UNTIL NO FURTHER IMPROVEMENT CAN BE MADE.					

ALIGNMENT INSTRUCTION

TAPE DECK SECTION

STEP	ALIGNMENT FREQ.	TEST EQUIPMENT	SIGNAL-IN	SIGNAL-OUT		REMARK
1		(1) COUNTER (2) OSCILLOSCOPE (3) POWER SUPPLY.	TEST TAPE STT-111N (OR MTT-111N) 3KHz.	SPEAKER OUTPUT.		(1) FUNCTION SW. IN TAPE POSITION. (2) VOL. ADJUSTED TO REF. OUTPUT. (3) EQ. CONTROL IN CENTER POSITION
2		SAME AS STEP 1.	TEST TAPE STT-113N (OR MTT-113N) 6.3KHz.	SAME AS STEP 1.	ADJUST TAPE HEAD SCREW TO GET MAX. OUTPUT.	SAME AS STEP 1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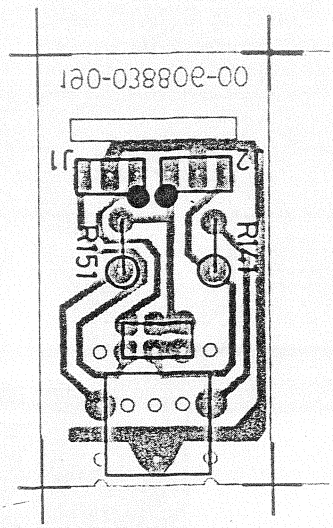
OUT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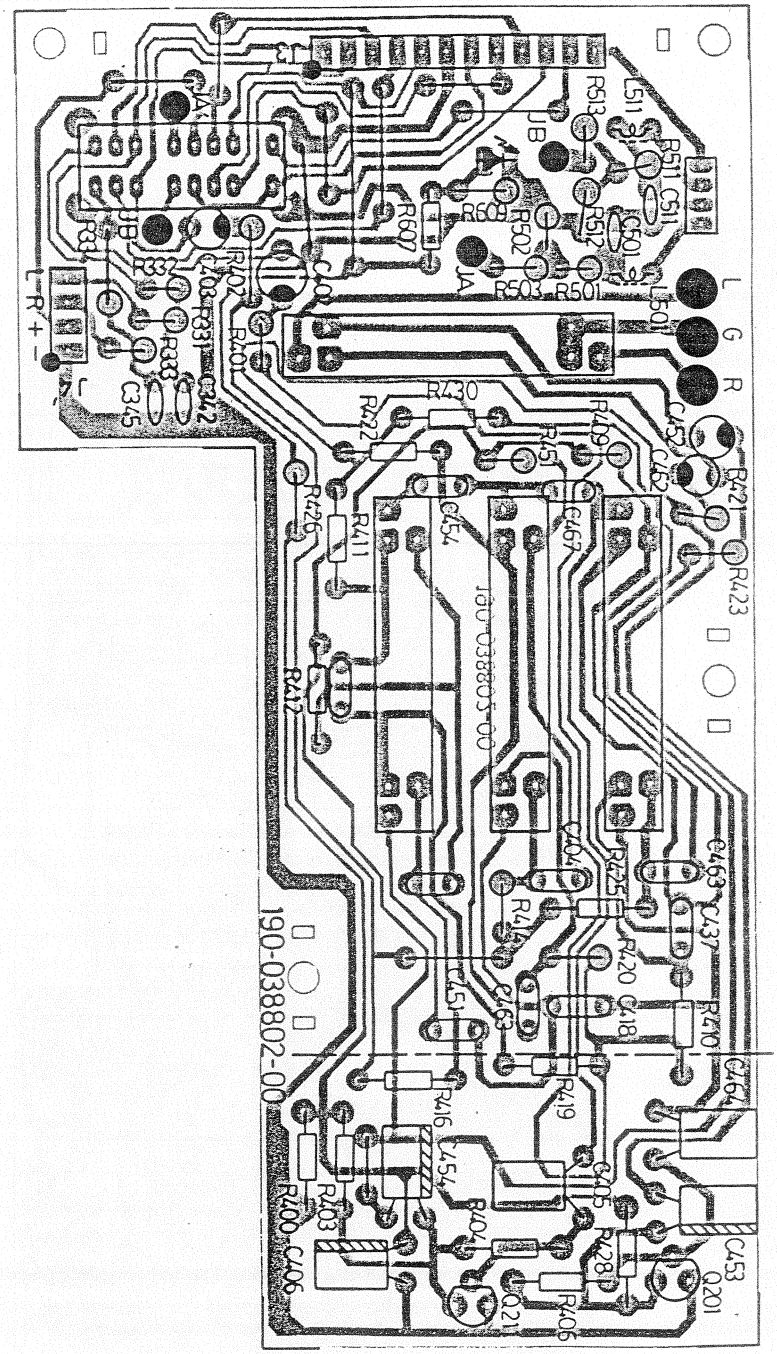
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R403
R400
R404
R405
R428
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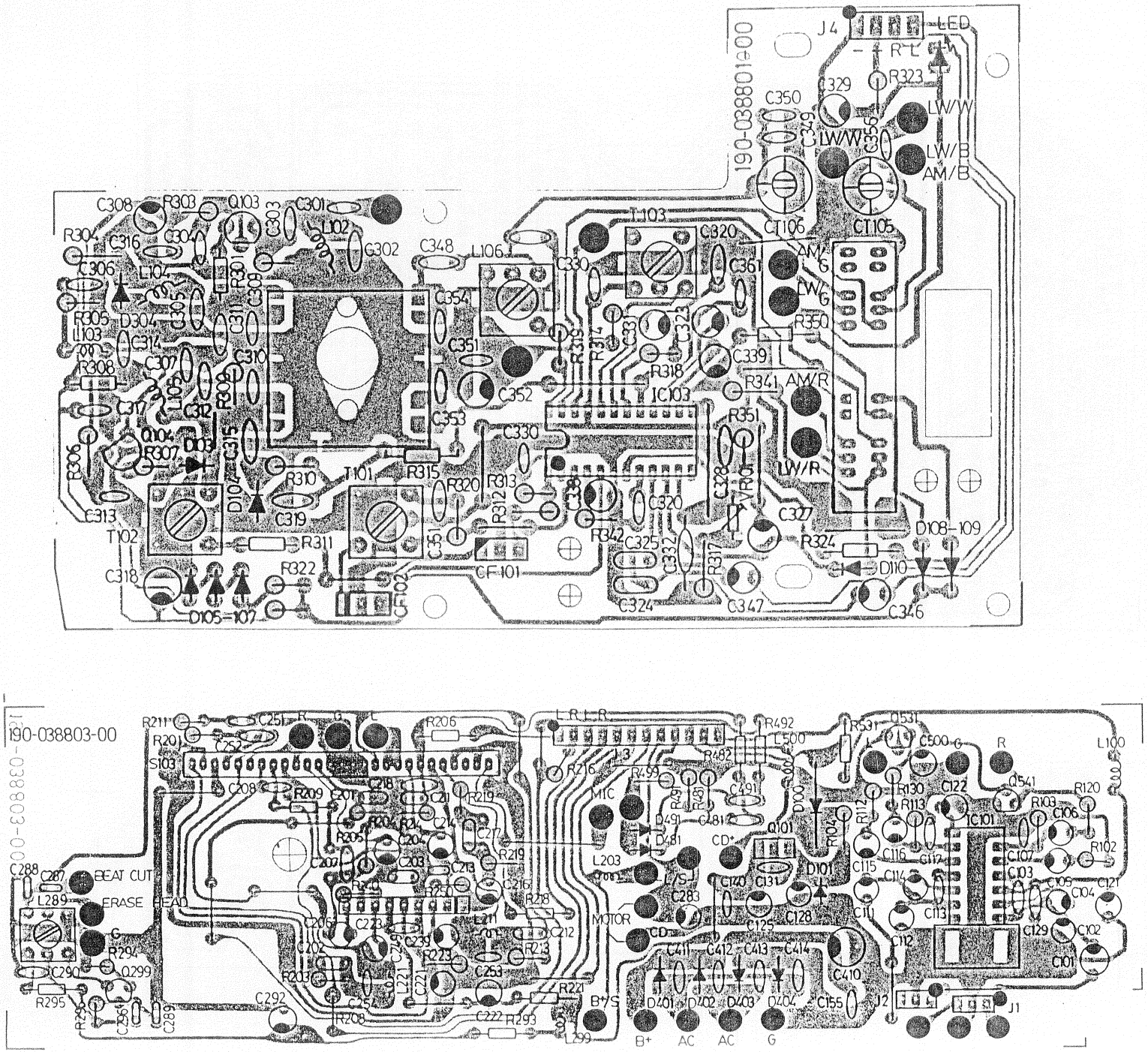
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LW/W
LW/B
AM/B
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C320
CT106
CT105
C308
R303
Q103
C301
L102
C303
R304
C316
C304
G302
C348
L106
C330
C361
C306
L104
C354
AM/G
LW/G
R305
D304
C305
C311
R301
C309
C351
R350
L103
C314
C331
C323
R314
R319
C339
R308
C307
C310
C352
R318
R341
AM/R
IC103
C317
L105
C312
R309
C353
R351
R306
Q104
D303
C315
C330
R307
C328
VR101
LW/R
D102
R310
T101
R315
R320
R313
C327
C313
C319
C338
C320
D108-109
T102
R311
R312
R342
C325
R324
C332
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D110
C318
R322
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CR102
C324
C347
C346
D105-107
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R206
R201
C252
S103
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C218
C210
R219
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C201
R204
C214
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C207
C203
C213
C216
R218
R250
L211
C206
C223
C212
C202
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R213
R223
C253
R203
C221
L221
R221
C292
C254
R208
C222
R293
L299
C288
C287
BEAT CUT
L289
ERASE
HEAD
R294
C290
Q299
R295
R296
C291
C289
L R L R
R492
L500
R482
R216
R499
MIC
R497
R496
C491
D491
C481
D481
L203
C283
MOTOR
C411
C412
C413
C414
B+S
D401
D402
D403
D404
B+
AC
AC
G
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Q531
C500-G
R
L100
R130
C122
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R113
R103
C106
IC101
R112
R104
D100
Q101
CD+
CD-
C116
C117
C115
C114
C107
C103
C105
C104
C121
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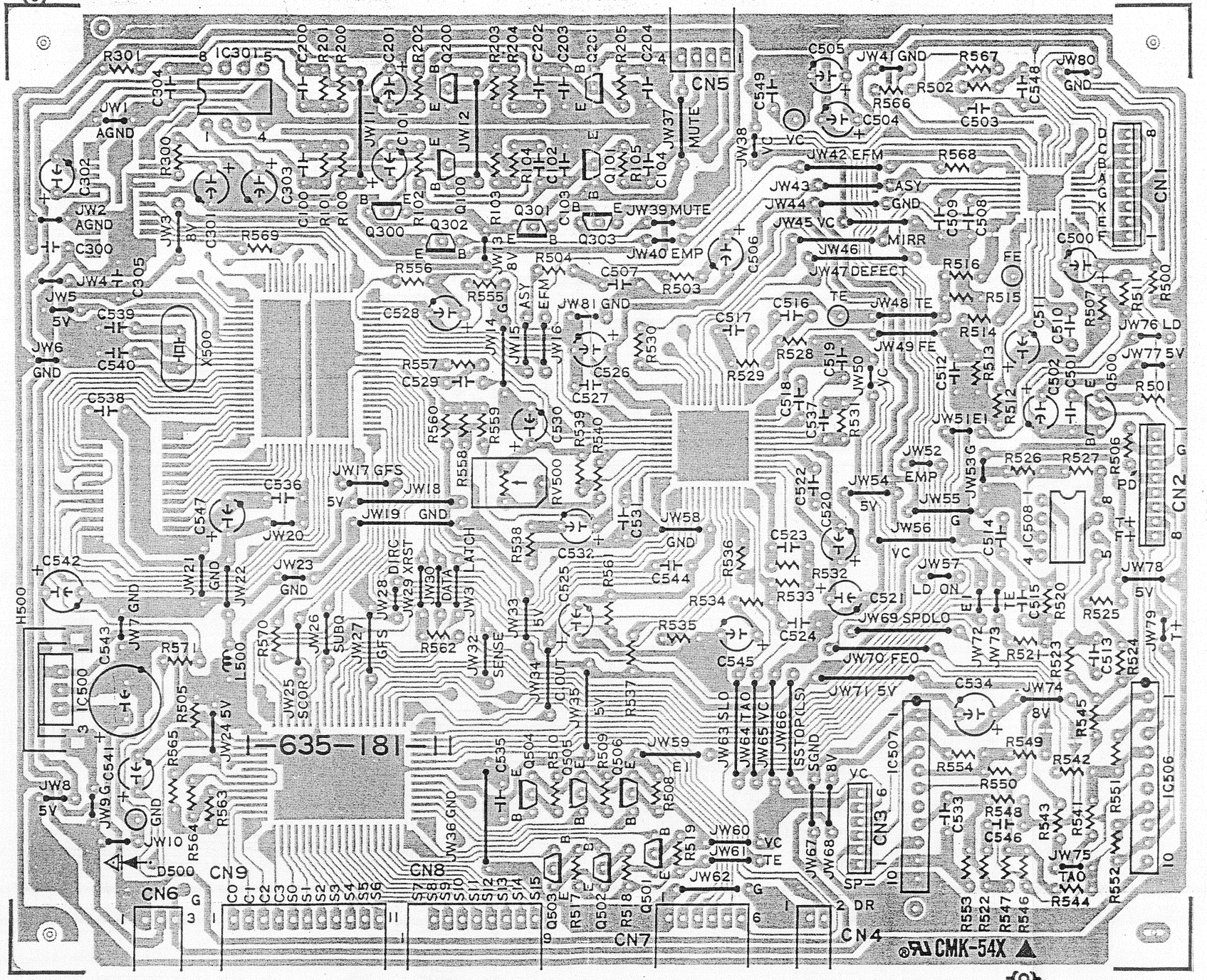
C101
C155
C410
J2
J1



SONY精機 1-635-181-11 (B)

部品面シルク図

半田面

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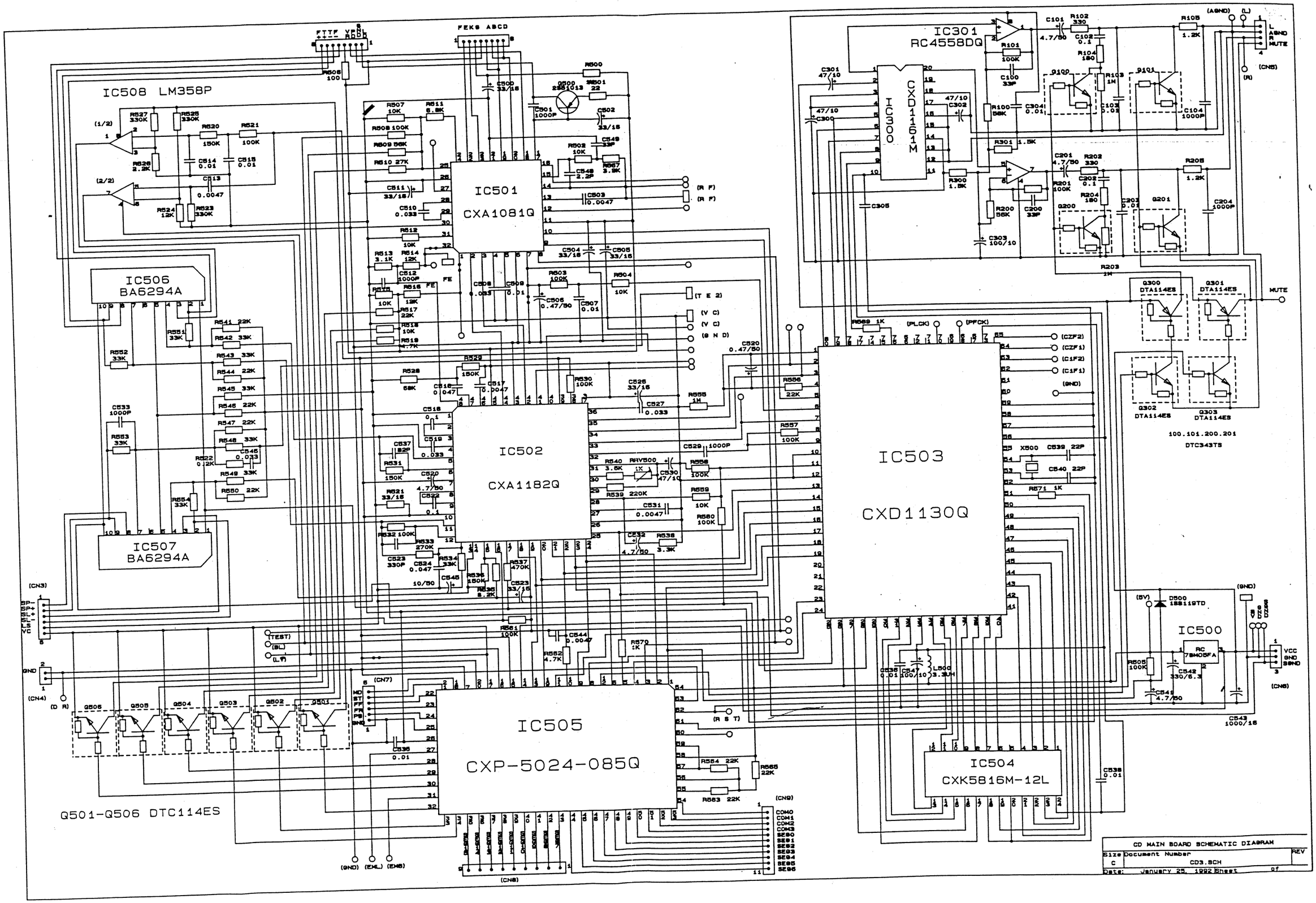
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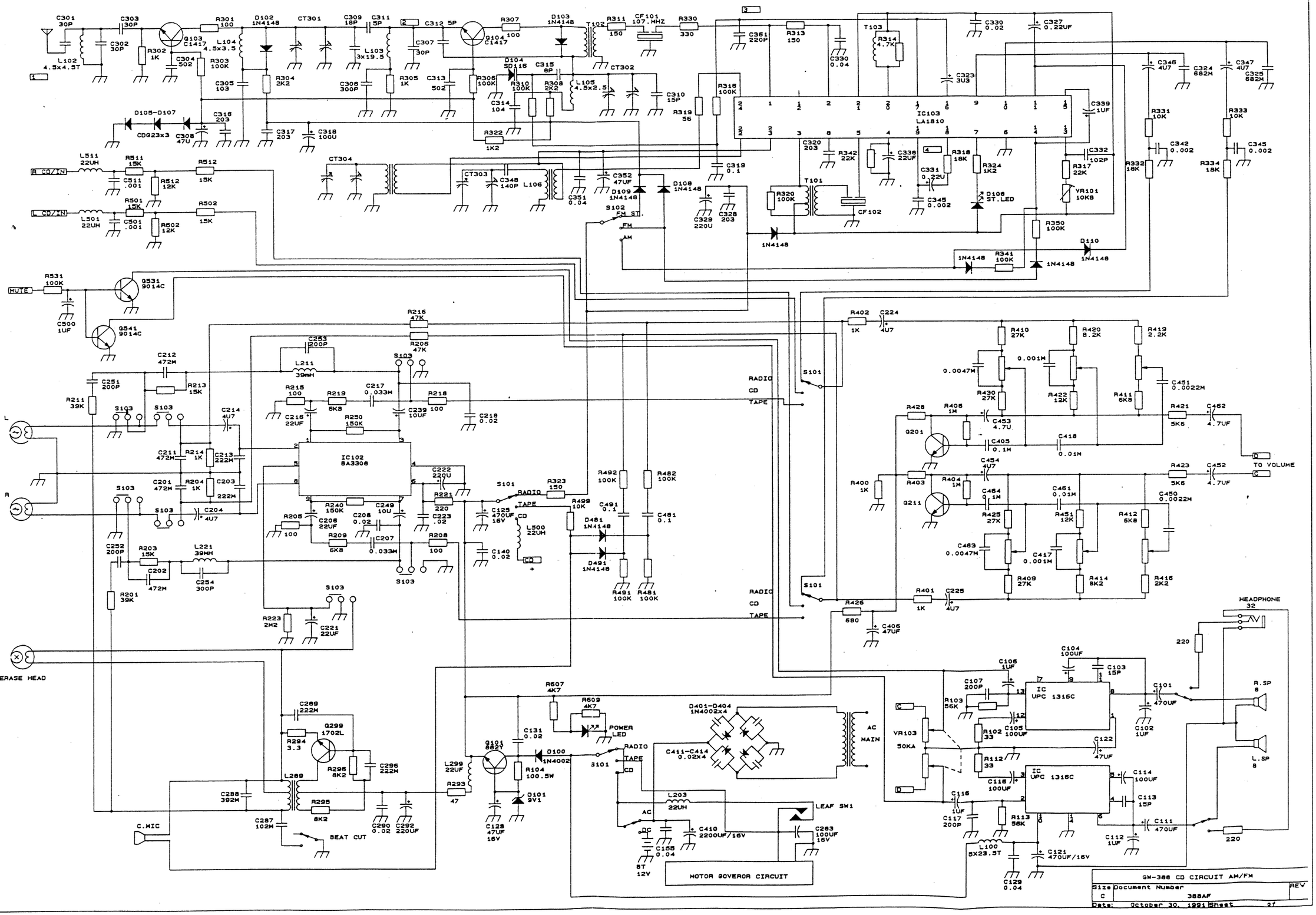
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C501 .001
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R206 47K
C253 200P
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C214 4U7
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R204 1K
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C221 220
C223 .02
R240 150K
C249 10U
C208 22UF
C208 0.02
R205 100
R209 5K8
C207 0.033M
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C125 470UF 16V
C140 0.02
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CD
S101 RADIO TAPE
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R481 100K
C252 200P
R203 15K
L221 39MH
C202 472M
C254 300P
R201 39K
R223 2M2
C221 22UF
ERASE HEAD
C.MIC
C289 222M
R294 3.3
Q299 1702L
R296 6K2
L289
C288 392M
R295 6K2
C287 102M
BEAT CUT
C290 0.02
C292 220UF
R507 4K7
R503 4K7
POWER LED
C131 0.02
Q301 8821
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R104 100.5W
D101 9V1
L299 22UF
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C128 47UF 16V
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TAPE
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C411-C414 0.02x4
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LEAF SW1
AC
DC
8T 12V
C155 0.04
C410 2200UF/16V
C283 100UF 16V
MOTOR GOVEROR CIRCUIT
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C224 4U7
R410 27K
R420 8.2K
R419 2.2K
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0.001M
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R422 12K
R411 6K8
C451 0.0022M
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R406 1M
C453 4.7U
R421 5K5
C462 4.7UF
Q201
C405 0.1M
C418 0.01M
TO VOLUME
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R426 580
C406 47UF
R401 1K
C225 4U7
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C106 1UF
C103 15P
C107 200P
IC UPC 1315C
R103 56K
C101 470UF
R.SP 8
R102 33
C105 100UF
C122 47UF
VR103 50KA
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C113 15P
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C112 1UF
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C121 470UF/16V
C129 0.04
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Size C
Document Number 388AF
REV
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